

Coherent Soft X-Ray Magnetic Scattering for the Study of Dynamics in 2-d Strongly Correlated Electron Systems

Joshua Turner
University of Oregon

In this talk, I will give a review of the newly developed coherent scattering endstation, a.k.a. “the flangosaurus”. I will briefly discuss the design of the endstation and the capabilities of the science it is able to produce, and touch upon Dynamic Scattering for the study of spatio-temporal fluctuations in the soft x-ray regime. I will then show some preliminary data of some two dimensional magnetoresistive oxides. This will be followed by some speculation as to why it is challenging to draw definite conclusions based on our analysis, and I will offer our first-order solution for the problem in the way of new detecting schemes.